

shining silvery white, translucent; beneath, colors above reproduced, but not so marked and wanting the metallic luster. Expands 30 mm.

Santa Rita Mountains, Arizona. Taken by E. A. Schwarz, June 13th.

***Eromene virescens*, sp. nov.**

Labial palpi, white, somewhat greenish brown on sides; maxillary palpi prominent, pure white; front white; thorax dull white; abdomen whitish, ochre tinted above; fore wing mouse color, washed with dull green, costa slightly grayish; a broad white stripe at middle of wing reaching from base to above middle of outer border, slightly concave above; inner margin also with a broad white stripe reaching quite a little up the outer edge; a rather faint blackish marginal line; fringes long, slightly more gray than wing; hind wings rounded at anal angle, somewhat sinuous on outer edge, whitish with a fuscous stain, becoming dark fuscous outwardly, this more broad and prominent at anterior angle. Expands 17 mm.

Arizona. The National Museum type number is 5186.

The insect is not exactly congeneric with *Eromene*; the labial palpi are very much shorter, the wing is of a different shape, and the markings are of a very different type—in this latter respect unique among American *Pyralidina*.

NEW SPECIES OF HETEROCERA FROM TROPICAL AMERICA.

BY WILLIAM SCHAUS.

Fam. CERATOCAMPIDÆ.

***Othorene curvilinea*, sp. nov.**

Male. Dark ochreous, tinged with lilacine on the outer margin of primaries, which are crossed by a fine dark reddish brown line from costa, near apex, to middle of inner margin, where the line curves up to near costa; a slight transverse streak at end of cell; the secondaries are crossed by a faint reddish line. Underneath duller; the outer margin of primaries and costal margin of secondaries lilacine; a reddish discal spot in primaries, and the line not reaching inner margin.

Female. The inner portion of the line is more oblique and parallel to outer portion; the secondaries are tinged with red. Expanse ♂ 68 mm., ♀ 91 mm.

Habitat: Colombia, Coatepec, Mexico. Allied to *Othorene jason* Bdv.

***Othorene cinerea*, sp. nov.**

Male. Primaries rather long and narrow, the inner margin rounded. Secondaries prolonged at anal angle. Primaries gray; the space between the lines brown-

ish gray; the lines wavy, broad, darker than the median space; the inner line perpendicular; the outer line from costa near apex to inner margin near the angle, a large white spot at the end of the cell. Secondaries with the outer margin and anal angle gray; the costal margin brown; the inner margin nearly black. Underneath dark gray with a broad blackish outer transverse shade on both wings. Abdomen golden brown with paler transverse bands. Expanse 54 mm.

Habitat: Rio Janeiro.

Othorene lilacina, sp. nov.

Male. Body above yellow; the patagite lilacine; dark transverse bands on abdomen. Body below lilacine; the legs red. Wings lilacine. Primaries, the costa, lines and a shade on outer margin, between veins 3 and 5, darker; the inner line nearly straight; the outer line lunular from costa near apex to middle of inner margin. Secondaries with the costal margin broadly suffused with brown; an outer dark line, nearly straight. Expanse 64 mm.

Habitat: Colombia.

Othorene irrorata, sp. nov.

Male light reddish brown, slightly irrorated with lilacine; the base narrowly the outer margin beyond the line, and a large round discal spot lilacine; the inner line indistinct, very close to base; the outer line fine, violaceous from apex, slightly curved, to inner margin at two-thirds from base. Secondaries roseate; the costa and outer margin tinged with light brown. Underneath primaries roseate at base and in disc; costal margin yellowish brown; outer margin lilacine; the outer line red; a large black discal spot. Secondaries very pale pink; the costal margin to line light yellowish brown.

Female. Primaries brown, more thickly covered with black and lilacine striae; the inner line fine, curved, indistinct; discal spot hardly visible; outer line, fine, dark, straighter than in the male. Secondaries as in the male. Underneath brownish; the base of primaries slightly roseate; a very large black discal spot; inner margin of secondaries broadly pinkish white. Expanse ♂ 58 mm., ♀ 79 mm.

Habitat: Jalapa, Orizaba, Mexico.

Othorene verana, sp. nov.

Body and wings reddish or ochreous brown. The lines violaceous; the inner line somewhat curved, broadly shaded inwardly with lilacine; the outer line straight from apex to middle of inner margin, outwardly shaded with lilacine; the outer margin towards apex similarly shaded; the discal spot white, sometimes surmounted by another minute spot. Secondaries with some reddish scales along inner margin; an indistinct transverse median shade. Expanse ♀ 84 mm.

Habitat: Jalapa, Mexico. This is the *O. cadmus* H. S. of the Biologia.

Adelocephala pamala, sp. nov.

Body yellow above, white below; patagia violaceous; front of legs reddish.

Primaries; base and outer margin violaceous; median space yellow on inner margin, and on costa towards apex, also some yellow streaks on inner side of outer line, otherwise median space is violaceous; a white discal spot broadly surrounded with violaceous; the outer line from apex to inner margin near angle. Secondaries pale yellow; slightly tinged with reddish on inner margin. Underneath pale yellow; the costa and outer margin of primaries violaceous. Expanse 35 mm.

Habitat: Castro, Parana.

Adelocephala totoma, sp. nov.

Male. Head and thorax pinkish gray. Abdomen blackish above, gray underneath. Primaries: the base narrowly, and outer margin beyond the outer line, pinkish gray, the intermediate space brown, with some dark gray striæ; the outer line dark gray from costa near apex to middle of inner margin; a white spot in the cell; the outer and inner margin with dark gray fringe. Secondaries roseate, the outer margin whitish. Underneath primaries roseate; the costa and apex grayish; the line only visible at apex. Secondaries grayish white. Expanse 59 mm.

Female. Primaries light grayish brown with darker striæ. Secondaries pale roseate, with outer margin grayish brown. Underneath entirely pale grayish brown without markings. Expanse 65 mm.

Habitat: Castro, Parana.

Hylesia subaurea, sp. nov.

Female. Head and thorax reddish brown. Abdomen black above, golden yellow below. Wings violaceous red, the lines darker. Primaries: the inner line broad near the discal spot which is large and also darker; the outer line slightly oblique to vein 3, then straight to inner margin, preceded by a paler shade; the outer margin paler except between veins 3-6, the paler portion limited by a subterminal, irregular line. Secondaries; the discal spot less distinct; the inner margin clothed with golden hairs; the outer line broad; a subterminal lunular line, leaving the outer margin paler. Underneath the base of the secondaries covered with golden hairs; the outer and subterminal lines close together at apex, then diverging to above anal angle. Expanse 60 mm.

Habitat: Orizaba, Mexico.

Hylesia corevia, sp. nov.

Male. Head, patagiæ, and abdomen light ochreous brown; thorax dark velvety brown. Primaries ochreous brown tinged with grayish buff on costa; the lines fine, dark brown; the inner line irregular; the outer line rounded below costa then parallel with outer margin; discal spot large, greenish buff; an indistinct subterminal shade; a dark marginal space below apex. Secondaries violaceous; the costal margin broadly grayish; the outer margin broadly ochreous brown; an outer and a subterminal violaceous line, the latter more wavy; discal spot large, orange red with a whitish center. Underneath primaries gray; in the cell and below apex on costal margin dark violaceous brown; a large bright red discal spot. Secondaries violaceous gray, reddish brown on outer margin; a fine darker outer line; discal spot red with yellowish center.

Female. Head and patagiae violaceous, thorax brownish. Abdomen light brown. Primaries violaceous, darkest at the base and on outer margin; the lines as in male, but heavier; discal spot very large, violaceous brown; the subterminal dark line followed by a paler shade; the outer line below vein 6 followed by a less distinct line. Secondaries violaceous gray; a fine dark outer line and an irregular subterminal shade; the discal spot large, round, dark gray, with paler center containing a minute reddish point. Expanse ♂ 57 mm., ♀ 76 mm.

Habitat: Rio Janeiro.

Automeris obscura, sp. nov.

Male. Primaries with the apex obtuse, the outer margin sinuate, dark violaceous brown; the costal margin almost black; some golden hairs on inner margin; inner line wavy, black; a large black discal spot; outer line black, straight, inwardly oblique from costal margin. Secondaries brownish black; a black outer line, evenly curved; a faint dark spot beyond the cell, crossed by an indistinct whitish line. Underneath the primaries are whitish beyond the cell; the discal spot and outer line very distinct; a faint subterminal line. The secondaries below are lilacine gray; the spot beyond cell very minute; an outer dark line, and broader subterminal shade. The body above is dark mingled with golden brown hairs, below golden brown. The ♀ is paler and more thinly scaled with the markings less distinct, the underside the same as the upper. The outer margin of primaries straight. Expanse ♂ 66 mm., ♀ 70 mm.

Habitat: Blumenau, Brazil.

Automeris postalbida, sp. nov.

Head and thorax dark brown. Abdomen ochreous brown with dark transverse lines. Primaries violaceous brown, darkest at base and beyond the outer line; the inner line dark, wavy, inwardly shaded with light brown; discal spot small, indistinct, surrounded below and outwardly by five velvety black spots, partly edged with light brown scales; outer line straight, dark brown, inwardly shaded with lilacine; the veins beyond the outer line brown; a subterminal wavy dark shade. Secondaries white; a large cluster of reddish ochre scales at base and basal half of inner margin; the ocellus large, dark grayish brown, containing a black spot crossed by a white line, and broadly circled with black; an outer curved black line; a broad blackish brown subterminal band, beyond which the outer margin is brown thickly mottled with gray and lilacine scales. Underneath the primaries are roseate; a very large discal spot, black, containing a brown center and white dot. Secondaries brown with a small white discal spot; the lines indistinct. Expanse 113 mm.

Habitat: Balzapamba. Allied to *A. larra* Walk.

Automeris flammans, sp. nov.

Body light roseate. Primaries dark roseate, crossed by a yellow line from middle of inner margin to costa near apex; discal spot indistinct. Secondaries smoky gray; the costal and outer margins pale roseate; the extreme outer margin and fringe pale brown; a black wavy outer line; the ocellus black containing some reddish brown

scales and a white mark, and circled with deep yellow. Underneath roseate, the inner margin of secondaries paler. Expanse ♀ 102 mm.

Habitat: Colombia.

Automeris amanda, sp. nov.

Head and thorax dark velvety brown. Abdomen light reddish brown with darker transverse lines. Primaries violaceous brown; the lines fine, darker; the inner line oblique from costa to median vein, then inwardly curved and outwardly curved on submedian; discal spot large, indistinct, marked on veins by dark velvety points; outer line nearly straight. Secondaries reddish fawn color; the ocellus large, pale brown, containing a black ovate spot which is faintly outlined and crossed by a white line, and is also circled with black; outer margin violaceous brown; an outer and subterminal brown line. Underneath the primaries are pale reddish brown; the discal spot large, dark brown, circled with black, and containing a white spot; an outer dark line and subterminal shade. Secondaries dark brown, irrorated with gray scales; a white discal point; indistinct median and outer dark lines. Expanse 86 mm.

Habitat: Bolivia.

Fam. MEGALOPYGIDÆ.

Mesoscia pascora, sp. nov.

Head brown. Collar pinkish white. Thorax dark gray; a white spot posteriorly. Abdomen dark gray. Primaries white; at the base a black spot surmounted by pinkish scales; costa black at base; a dark gray band from inner margin where it is broad, and narrowing towards apex, broken by the whitish veins; a terminal row of gray spots not reaching apex. Secondaries whitish; inner margin gray; a gray shade from inner margin to costa near apex; a terminal row of gray spots; a fringe gray at base. Expanse 25 mm.

Habitat: Castro, Parana.

Megalopyge albescens, sp. nov.

Body white with transverse dark gray lines. Primaries white; some dark gray spots at base; an inner transverse row of smoky black spots extending on costa as far as the end of the cell; a narrow gray outer band, partly obsolete and broken by the veins; a subterminal row of large gray spots, partly filled in with white; a terminal row of dark gray spots. Secondaries white; a terminal row of small gray spots. Expanse ♂ 48 mm.

Habitat: Castro, Parana.

Megalopyge amita, sp. nov.

Body yellow. Primaries covered with wavy hairs; dark lilacine gray; the apex and outer margin pale yellow; a large yellow space on the inner margin at base. Secondaries lilacine gray; the outer margin narrowly yellow. Expanse ♀ 36 mm.

Habitat: Castro, Parana.

Megalopyge vulpina, sp. nov.

Frons, legs and body underneath brown. Vertex, thorax and abdomen above ochreous brown. Wings gray; a subterminal whitish line on the primaries; fringe darker. Expanse ♂ 36 mm.

Habitat: Castro, Parana.

Sciathos arpi, sp. nov.

Frons brown. Thorax and abdomen ochreous. Primaries dark gray, ochreous at the base; costa, and a line from base below subcostal vein, and joining costa before the apex, yellow; fringe on inner margin and outer margin to near apex yellow. Secondaries, basal half and inner margin ochreous, otherwise dark gray; fringe yellow towards anal angle. Expanse 37 mm.

Habitat: Rio Janeiro.

Norape venata, sp. nov.

Palpi and fore coxæ black; vertex yellow; antennæ yellow; thorax and abdomen white. Primaries white with fine black lines in the cell and between the veins, there being two lines between the median and submedian veins from base to outer margin. Secondaries white. Underneath the lines on primaries are heavier and dark brown; the costa broadly suffused with brown. Expanse 34 mm.

Habitat: Castro, Parana.

Fam. LIMACODIDÆ.

Euclea herbina, sp. nov.

Frons, palpi, legs and abdomen light brown. Vertex, collar and thorax green. Primaries green; the costa, inner margin and base finely brown; the outer margin more broadly so, especially at inner angle and vein 6. Secondaries ochreous; the outer margin light brown. Expanse 22 mm.

Habitat: Espiritu Santo. The brown outer margin is much narrower than in *E. viridiplena* Walk.

Euclea dolita, sp. nov.

Frons, palpi and legs brown. Abdomen pale buff. Vertex, collar and thorax green. Primaries green; costal margin finely light brown; inner and outer margins finely dark brown; base of fringe silvery white, otherwise fawn color. Secondaries fawn color. Expanse 21 mm.

Habitat: Castro, Parana.

Euclea baranda, sp. nov.

Body brown. Wings brown; the primaries with darker brown shadings at the base, beyond the cell and below the median vein, these shadings somewhat iridescent; a dark spot in the cell; a silvery white dentate line below the cell, between the me-

dian and submedian veins; a subterminal row of silvery white spots, chiefly noticeable near the apex. Expanse 25 mm.

Habitat: Colombia. Allied to *Euclea diversa* Druce.

Euclea chiriquensis, sp. nov.

Body very dark brown. Primaries brown; the margins and median vein somewhat violaceous; an interrupted outer row of white spots, the three below the costa being the most conspicuous. Secondaries duller brown. Expanse ♀ 27 mm.

Habitat: Chiriqui. Not having a ♂ of this species I am a little doubtful about its position.

Perola lucia, sp. nov.

Body light brown. Wings grayish brown; some white scales at base and beyond cell; a dark streak in the cell; a subterminal sinuous white line; base of the fringe pale. Expanse 22 mm.

Habitat: St. Lucia, B. W. I.

Natada cochuba, sp. nov.

Body brownish gray. Primaries gray, irrorated with dark brown scales; a dark line from below costa at two-thirds to inner margin at one-third from base; a subterminal straight brown line from costa to inner angle; fringe brown divided by a pale line. Secondaries brownish gray; a terminal dark line. Expanse 32 mm.

Habitat: Castro, Parana.

Sisyrosea aroensis, sp. nov.

Vertex and color yellowish; body otherwise pale roseate brown. Primaries pale pinkish brown with a few scattered dark brown scales; the base of the wings slightly darker, and some indistinct darker transverse shades. Secondaries pale brown. Expanse 17 mm.

Habitat: Aroa, Venezuela.

Fam. EUPTEROTIDÆ.

Carthara surynorta, sp. nov.

♀ dark gray or reddish brown. Primaries with geminate inner and outer lines as in *C. drepanoides* Wlk.; the pale subapical line is evenly curved outwardly from costa and limits a triangular darker space. The secondaries are reddish shaded with gray, and the subterminal line is preceded by a broad darker band. The ♀ is usually reddish brown with the lines as in the ♂. Expanse ♂ 28 mm., ♀ 33 mm.

Habitat: Orizaba, Mexico. Castro, Parana.

Carthara oaxacana, sp. nov.

♀ pale gray with the lines as in *C. surynorta* Sch.; the triangular space not darker, but followed on costa by a pale reddish shade. The subterminal line on secondary is whiter. Expanse 31 mm.

Habitat: Oaxaca, Mexico. Possibly a West Coast race of *C. surynorta*.

***Carthara pamina*, sp. nov.**

♂ pale reddish brown; the lines as in *C. drepanoides* Wlk.; the dark spot beyond the cell connected with costal spot by a dark line. Secondaries reddish mottled with gray and white on inner margin. The ♀ is darker reddish brown; the geminate lines being filled in with a still darker shade. Expanse ♂ 26 mm., ♀ 35 mm.

Habitat: Castro, Parana.

***Carthara orizava*, sp. nov.**

Differs from *C. drepanoides* Wlk. in being gray instead of reddish brown, and is possibly only a variety of that species. Expanse ♂ 35 mm., ♀ 43 mm.

Habitat: Orizaba, Mexico.

***Thelosia meldola*, sp. nov.**

♀ palpi and vertex reddish brown; thorax gray; abdomen above reddish brown with transverse white lines, underneath gray. Primaries: base to inner line, and outer margin light gray, otherwise reddish brown crossed by a whitish outer line; the veins paler on the brown portion of wing; discal spot dark, oval, edged with grayish white; a minute diaphanous spot between veins 5 and 6 on gray marginal space. Secondaries light brown with an indistinct darker geminate outer line. Expanse 30 mm.

Habitat: Castro, Parana.

***Olceclostera bilinea*, sp. nov.**

Head and abdomen brown, collar and thorax grayish. Primaries light brown irrorated with dark brown scales; a median space, fawn color, limited by two dark brown lines, further apart on costal than on inner margin; a faint transparent spot between veins 5 and 6; an outer wavy pale shade. Secondaries dull brown, showing the median and outer dark lines of underside. Expanse 33 mm.

Habitat: Aroa, Venezuela.

***Olceclostera mediana*, sp. nov.**

Body violaceous gray. Primaries: basal half dark reddish brown, outwardly crenulate, and crossed by a broad inner band, irregular, gray mottled with black; some gray scales at base, outer half violaceous gray; a blackish crenulate outer line below vein 4; a brownish subterminal shade; a large and a small transparent subapical spot. Secondaries reddish brown, mottled with gray at anal angle. Expanse 36 mm.

Habitat: Castro, Parana.

***Zanola narda*, sp. nov.**

Antennæ white with brown pectinations. Body brown, the abdomen somewhat paler than the thorax. Primaries brown; an inner fine white line angled on costa, then

inwardly oblique towards base of inner margin; a minute dark discal point circled with whitish scales; beyond the cell an oblique reddish brown line from costa to inner margin, followed by a white line slightly curved on costa; this latter line is partly cut and preceded by a fine blackish line; the subterminal line fine, dark brown, partly lunular, and is preceded towards apex by some white scales. Secondaries whitish; the costal and outer margins broadly brown; a small brown discal spot; a median brown shade followed by a fine dark line. Underneath white, the costal margins and apices brown, also the outer margin of secondaries to near anal angle; median and subterminal brown shades, and discal spots; the fringes brown tipped with silvery white. The ♀ has the lines on primaries dark gray instead of white. The secondaries and also both wings underneath are entirely brown. Expanse ♂ 34 mm., ♀ 40 mm.

Habitat: Castro, Parana.

Zanola liliana, sp. nov.

Body fawn color; the patagiae mottled with lilacine scales and fringed with darker hairs. Primaries lilacine mottled with reddish fawn color; the inner line dark velvety brown, preceded by a lilacine shade, slightly sinuous; the discal spot large, pale, containing a dark streak; beyond the cell a reddish brown line, slightly curved; the outer line somewhat curved, fine, black, preceded by a lilacine shade; the subterminal fine, dark brown, deeply lunular; the outer margin reddish fawn color; a terminal brown line. Secondaries brownish; the outer margin yellow; a median and an outer transverse line; a terminal brown line. Underneath the primaries are pale fawn color mottled with brown at apex; a median brownish line. The secondaries are shaded with lilacine; a median dark brown line, angled beyond the cell, and followed by a broad pale brown shade; a brown shade in cell and to apex, the outer line wavy, fine, black; subterminal and terminal brown shadings broken by the veins. Expanse 41 mm.

Habitat: Castro, Parana.

Fam. LASIOCAMPIDÆ.

Hydrias palota, sp. nov.

♂ Palpi, head and thorax gray, mottled with yellow hairs. Body dark gray. Primaries whitish, thinly irrorated with gray scales; the base dark gray; a fine median gray lunular line; a faint subterminal grayish line; no discal spot. Secondaries with the base and inner margin dark gray, the outer portion whitish, thinly irrorated with light gray. ♀ with the irrorations slightly darker. Expanse ♂ 34 mm., ♀ 43 mm.

Habitat: Castro, Parana.

Hydrias pygma, sp. nov.

♂ Body blackish, mottled with brown hairs. Primaries dark brown, the veins nearly black; a basal geminate dark line from costa to median vein, followed in cell and on costa by a whitish space; a dark spot at end of cell; a subterminal, irregular,

whitish line, broadening at apex and inner angle; fringe dark with white spots at ends of the veins. Secondaries dark brown; the costal margin whitish crossed by three brown lines. Expanse 30 mm.

Habitat: Castro, Parana.

Hydrias varona, sp. nov.

♀ Body dull grayish brown. Wings dull grayish brown, the veins slightly olivaceous. Primaries a broad median paler shade on costa, rather indistinct; a subterminal wavy paler shade. Expanse 50 mm.

Habitat: Castro, Parana. Somewhat like the species of *Titya*.

NEW AMERICAN TINEINA.

By AUGUST BUSCK.

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In the present unsatisfactory state of our knowledge of American Tineina it is of little value (or worse) to describe promiscuously new species from collected material, difficult of subsequent recognition. No one is any the better off because he learns that such and such a new species of *Gelechia* or *Lithocolletis* has been taken in such and such a locality. Only when working up a group, either faunistic, or preferably systematic, does it seem to me excusable at present to describe more species, which are known from the type specimen only. Exceptions may be made in the case of new generic forms or especially striking or otherwise interesting species. I believe anyone will endorse this view who has tried to grope through Chambers' flood of descriptions, many of which represent only valueless names, a dead weight on our lists, and which will not for a long time, if ever again, be connected with the species they represent. But as it will take years before the American Tineina fauna can be worked up systematically by groups, which is the end for which we should strive, it does not seem desirable in the meanwhile to withhold from publication new forms, of which the life history has been ascertained and which are of such interest as to be of some positive gain to our knowledge.

And here I might point out an opportunity for any student, who has not the facilities or the desire to do systematic work, but who still